

AMENDMENTS TO THE CLAIMS:

Please add claims 19 and 20 as follows:

1. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate, comprising:

forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method at a temperature of from 800°C to 900°C directly on a silicon (Si) substrate or after forming a buffer layer on said silicon substrate;

removing substantially a whole of said silicon substrate by etching a rear surface of said silicon substrate after a completion of said forming a first Group III nitride compound semiconductor or during said forming a first Group III nitride compound semiconductor; and

forming a second Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method at a temperature of not lower than 1000°C after said removing substantially the whole of said silicon substrate.

2. (Canceled)

3. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, further comprising:

removing a part of said first Group III nitride compound semiconductor layer from said rear surface by etching after a completion of said forming a second Group III nitride compound semiconductor layer or during said forming a second Group III nitride compound semiconductor layer.

4. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 3, further comprising:

forming, as an etching stopper layer, a Group III nitride compound semiconductor layer comprising a larger amount of aluminum than an amount of aluminum comprised in each of the first Group III nitride compound semiconductor layer and the second Group III nitride compound semiconductor layer before said forming a second Group III nitride compound semiconductor layer, wherein said removing almost the whole of said silicon substrate comprises completely removing the first Group III nitride compound semiconductor layer.

5. (Canceled)

6. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein a film thickness of said first Group III nitride compound semiconductor layer is not larger than 200 μm .

7. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein said buffer layer comprises a Group III nitride compound semiconductor layer comprising at least one of aluminum and a multi-layer comprising at least one Group III nitride compound semiconductor layer comprising aluminum.

8. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate, comprising:

forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method directly on a silicon (Si) substrate or after forming a buffer layer on said silicon substrate;

removing substantially a whole of said silicon substrate by etching a rear surface of said silicon substrate after a completion of said forming a first Group III nitride compound semiconductor layer or during said forming a first Group III nitride compound semiconductor layer; and

forming a second Group III nitride compound semiconductor layer at a temperature of not lower than 1000°C,

wherein said forming a first Group III nitride compound semiconductor layer is carried out at a temperature of from 800°C to 900°C.

9. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate, comprising:

forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method on a silicon (Si) substrate at a temperature of from 800°C to 900°C;

removing substantially a whole of said silicon substrate by etching a rear surface of said silicon substrate; and

forming a second Group III nitride compound semiconductor layer at a temperature of not lower than 1000°C.

10. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said first Group III nitride compound semiconductor layer is formed directly on said silicon substrate.

11. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said first Group III nitride compound

semiconductor layer is formed on said silicon substrate after forming a buffer layer on said silicon substrate.

12. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said silicon substrate is removed after forming said first Group III nitride compound semiconductor layer.

13. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said silicon substrate is removed during forming said first Group III nitride compound semiconductor layer.

14. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein a film thickness of said first Group III nitride compound semiconductor layer is not smaller than 10 μm .

15. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein the Group III nitride compound semiconductor substrate is substantially free from warp.

16. (Canceled)

17. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein the rear surface of said silicon substrate opposes the surface on which said Group III nitride compound semiconductor layer is formed.

18. (Previously Presented) A method of producing a Group III nitride compound semiconductor substrate according to claim 8, wherein the rear surface of said silicon substrate opposes the surface on which said Group III nitride compound semiconductor layer is formed.

19. (New) A method of producing a Group III nitride compound semiconductor substrate, comprising:

forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method on a silicon (Si) substrate at a first temperature;

removing substantially a whole of said silicon substrate by etching a rear surface of said silicon substrate; and

forming a second Group III nitride compound semiconductor layer at a second temperature,

wherein said first temperature is different from said second temperature.

20. (New) The method according to claim 19, wherein said second temperature is higher than said first temperature.